Final Preparations Underway for Destination NPS: Teaching from Space

By Dale Kocha

For an institution that has been operating for now 100 years, you would think all educational firsts at the Naval Postgraduate School would have been exhausted by now. Not so — on Saturday, April 10, one of the most unique educational events NPS has ever seen will occur in the university’s King Auditorium. Destination NPS: Teaching from Space will provide a one-of-a-kind educational experience for scores of 8th grade students from around the Peninsula in addition to lucky members of the NPS family who register in time.

Part of NASA’s Teaching from Space program, the effort will provide a rare, live-in-flight lesson from three of the astronaut’s on board the Space Shuttle Discovery during its 13-day mission to the International Space Station. One of the teachers, shuttle Commander Navy Capt. Alan Poindexter, is an NPS graduate. “This will be a truly remarkable event, the stars definitely aligned for us,” said NPS Director of Alumni Relations and Centennial Planning Kari Miglaw. “The magic of space exploration inspire so many people to do great things, so to be a leader in space education, NPS is the perfect place for this kind of event, and when better than during our Centennial year?”

NPS currently has three astronauts, two former and one active, on its faculty roster, and all three will be participating in the educational downlink. National Reconnaissance Office Chair Dan Bursch, who once held the record for longest duration in space, put the event in great historical perspective.

“In 1903, just six years prior to the establishment of the Naval Postgraduate School, the Wright Brothers completed the first successful flight at a speed of less than seven miles per hour. At NPS celebrates its Centennial, it seems fitting that we chair with one of our alumni as he travels 17,500 miles per hour,” he said. “In another 100 years from now, I can only imagine where the NPS graduate will be located in a similar downlink. On a future Lunar Outpost? On Mars? Or maybe travelling more than 25,000 miles per hour on a journey to visit a Near Earth Asteroid?”

Professor Rudy Panholzer, Chairman of the NPS Space Systems Academic Group, also gave the event its appropriate historical context. “NPS has a long, illustrious connection with America’s efforts to explore space, our graduates have been a part of every NASA program — from Mercury to the Space Shuttle. I am honored that we are able to give young students in our area direct access to the magic of space exploration,” he said. “And who knows, perhaps some of some these young men and women will one day again be on our campus as students, inspired by what they experienced during this great event.”

John Phillips, NASA Chair Professor and the active astronaut of the three NPS faculty, stated the benefits of programs like the downlink are realized not only by the public, but by the astronauts themselves as well.

“Astronauts have a keen awareness that they are members of a very large team. They are just the lucky ones who get the glamorous job — who get to ride the rocket — but they represent a team of dedicated and talented people,” Phillips noted. “They are proud of their team’s accomplishments, and they like to be able to show the results to the general public, to say, ‘This is the space shuttle and space station that you paid for, this is what we’re doing on board, and we want you to be as proud of it as we are.”

Miglaw was quick to credit two key NASA personnel that made the downlink a reality. “NPS being selected for this unique opportunity is truly due to the dedication of Kerry McCaen, Assistant Director for Alumni Relations and Dan Bursch, former astronaut and NRO Chair,” she said.

The downlink is open to all NPS students, faculty and staff, and their families, but you must register to attend. Go to www.nps.edu/100 for information and to register for the event.

Cobra Gold Presents ‘Golden’ Opportunity

By MC3 John R. Fischer

A professor, two current students and one alumna from the Physics Department of the Naval Postgraduate School were recently afforded a great opportunity — to perform field experiments with a device they have developed that could mean the difference between life and death for troops during combat situations. The experiments were part of the international Cobra Gold exercises held in Thailand in early February.

Professor Nancy Haegel of the Physics Department, part of NPS’ Graduate School of Engineering and Applied Sciences (GSEAS), along with students Lt. Karl Burnett and Lt. Aaron Woodley, and former student Maj. Eric Rose, traveled to Thailand at the invitation of the U.S. Marine Corps Forces Pacific Experimentation Center to take part in this 29th installation of the annual combined, joint exercise.

“Our team led a demonstration and assessment effort for a Vehicle-Mounted Identification Friend or Foe (VMIFF) device,” Haegel explained. “It’s a prototype device designed to mitigate fratricide — a triggered warning signal for pilots and forward air controllers to prevent from engaging friendly vehicles.”

The research team and device caught the personal attention of the Secretary of Defense, NPS graduate (’75) Gen. Apichart Penkitti, who is slated to become the next inductive to the NPS Hall of Fame. “We had the benefit of briefing a lot of the top Thai people,” said Burnett. “The briefings kept going up and up until we received a surprise visit from Gen. Pentikhi. He appeared to be very happy seeing the U.S. and Thailand keeping such an open, healthy relationship.” Pentikhi is the equivalent of the America’s Secretary of Defense.

Cobra Gold offers a chance for more than 20 nations to focus on multilateral peacekeeping operations, humanitarian assistance and disaster relief response, as well as technology demonstrations. The exercises and technology demonstration provided a golden opportunity for Haegel and her team to put one of their newest devices to work in the field.

The VMIFF produces a mid-wave infrared signal that can be observed during both day and night operations. NPS’ VMIFF work is sponsored by the Rapid Reaction Technology Office within the Office of the Secretary of Defense.

Physics student Lt. Karl Burnett gives Thai Gen. Apichart Penkitti, Thailand’s Permanent Secretary of Defense and an NPS graduate, a hands-on briefing of a prototype Vehicle-Mounted Identification Friend or Foe (VMIFF) device. (Photo courtesy of Lt. Karl Burnett.)
**Announcements**

In the wake of the Naval Postgraduate School’s Command Inspection last fall, the Navy Inspector General’s Office recognized the many unique complexities of the NPS mission and the different funding sources associated with our mission execution. With this in mind, they have recommended revisions to SECANV and OPNAV guidance to designate NPS as an Echelon II command that warrants a fully-former Inspector General Office. As a result, President Daniel Oliver has selected Navy CmDr. Al Shaffer as the command Inspector General (IG). Former SECANV guidance, CmDr. Shaffer will report directly to President Oliver as command IG, and oversee the IG and Command Evaluation (CE) programs. Welcome CmDr. Shaffer!

**Faculty Notes**

Dr. Dorothy Denning was named a 2010 Security Superstar - Visionary by Technology Review. In her book, “Thinking in Circles about Obedience,” and in her novel systems dynamics approach to addressing the nation’s obesity epidemic, was reviewed in MIT’s Technology Review magazine (March 2010). Read the full review at [http://bit.ly/1Bh4oX](http://bit.ly/1Bh4oX).

**Moltz Honored With Hamming Award**

Associate Professor James Clay Moltz has been selected as the recipient of the 2010 Richard W. Hamming Annual Faculty Award for Interdisciplinary Achievement. Moltz holds a dual appointment as a professor in both the Department of National Security Affairs (NSA) and the Monterey Institute of International Studies (Academic Group). As an active contributor to both the NSA and SSAG departments, Moltz adds a unique point of view to the discussions and deliberations of each group.

"In strengthening NPS and SSAG’s impact on the space community, Associate Professor Moltz exemplifies Professor Hamming’s commitment to interdisciplinary scholarship and is thus well-deserving of this prestigious award," noted Executive Vice President and Provost Leonard Ferrari in his announcement of the award.

Moltz expressed true surprise when he learned of his recognition, but was quick to credit his departmental colleagues on stronger ground when they understand technology and it’s the students that should benefit the most. "I find that it’s the students that should benefit the most. "I find that it’s the students that should benefit the most."

**Calendar**

- April 6: Commandant Sam Farr Groundbreaking Ceremony – P197 (Ingersoll Hall)
  - POC: Vickie Hoy Ext. 7748
- April 7-9: 9th Annual Foreign Area Officer Conference
  - POC: Michele Merenbloom Ext. 3275
- April 8: Capt. (ret.) Mike Hewitt
  - Vice President, Sonalytics, Inc.
  - Menneken Lecture
  - POC: Rear Adm. (ret.) Jerry Ellis Ext. 2488
- April 16-19: NorCal Chapter, Naval Submariner League Golf Tournament
  - 110th Anniversary of the U.S. Navy Submarine Force Monterey Pines Golf Course
  - POC: Lt. Alan Agor Ext. 2895
- April 22: Capt. (ret.) Jim Patron
  - Former Director, CNO Executive Panel
  - Menneken Lecture
  - POC: Rear Adm. (ret.) Jerry Ellis Ext. 2488
- April 27-28: NPS Board of Advisors Meeting
  - POC: Joyce Panza Ext. 2514

**Historical Highlights**

In April 1944, then Capt. Herman Spangenberg turned over command of the USS Nashville (CL43), a light cruiser that had been engaged in several key Pacific battles for Midway to the Solomon Islands. Despite a shortage of officers in combat and his protests to remain at sea, his next command would be the Naval Postgraduate School at Annapolis. There, under the guidance of two CNOs – Fleet Adm. Ernest King and Chester Nimitz – Spanagel pushed several major legislative acts through Congress between 1945 and 1948, including authorization for NPS to confer degrees and the appropriations bill to purchase the Hotel Del Monte for today’s campus in Monterey. Adm. and Mrs. Spanagel are shown here during the dedication of Spangenberg Hall in 1956 named in his honor – today it is home to the Graduate School of Engineer- ing and Applied Sciences.